#7

1642

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/508,849

DATE: 03/02/2001 TIME: 13:18:50

Input Set : A:\1110-0266P.ST25.txt
Output Set: N:\CRF3\03022001\I508849.raw

ENTERED

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3 <110> APPLICANT: NAGATA, Shigekazu et al.
 5 <120> TITLE OF INVENTION: Novel Fas Ligand Derivative
 7 <130> FILE REFERENCE: 1110-0266P
 9 <140> CURRENT APPLICATION NUMBER: 09/508,849
10 <141> CURRENT FILING DATE: 2000-03-17
12 <150> PRIOR APPLICATION NUMBER: JP P1997-252541
13 <151> PRIOR FILING DATE: 1997-09-17
15 <160> NUMBER OF SEQ ID NOS: 16
17 <170> SOFTWARE: PatentIn Ver. 2.1
19 <210> SEO ID NO: 1
20 <211> LENGTH: 258
21 <212> TYPE: PRT
22 <213> ORGANISM: Artificial Sequence
24 <220> FEATURE:
25 <223> OTHER INFORMATION: Description of Artificial Sequence: amino acids at
26
         111-133 from N terminal are deleted from natural
27
         human Fas ligand
29 <400> SEQUENCE: 1
30 Met Gln Gln Pro Phe Asn Tyr Pro Tyr Pro Gln Ile Tyr Trp Val Asp
            3
33 Ser Ser Ala Ser Ser Pro Trp Ala Pro Pro Gly Thr Val Leu Pro Cys
                20
                                     25
                                                          30
36 Pro Thr Ser Val Pro Arg Arg Pro Gly Gln Arg Arg Pro Pro Pro Pro
           35
                                 40
                                                     45
39 Pro Pro Pro Pro Pro Leu Pro Pro Pro Pro Pro Pro Pro Pro Pro Leu Pro
                             55
                                                 60
42 Pro Leu Pro Leu Pro Pro Leu Lys Lys Arg Gly Asn His Ser Thr Gly
                        70
                                             75
                                                                  80
45 Leu Cys Leu Leu Val Met Phe Phe Met Val Leu Val Ala Leu Val Gly
                                         90
                                                              95
                    8.5
                   Met Phe Gln Leu Phe His Leu Gln Lys Glu Pro Ser
48 Leu Gly Leu $ly
49
               10.0/
                                    105
                                                         110
51 Pro Pro Pro Glu Lys Lys Glu Leu Arg Lys Val Ala His Leu Thr Gly
52 K S 115 120 125
54 Lys Ser Asn Ser Arg Ser Met Pro Leu Glu Trp Glu Asp Thr Tyr Gly
                        . .
       130/
                            135
                                                14.0---
57 Ile Val Leu Leu Ser Gly Val Lys Tyr Lys Lys (Gly Gly Leu Val Ile
                                            155
                       150
60 Asn Glu Thr Gly Leu Tyr Phe Val Tyr Ser Lys Val Tyr Phe Arg Gly
                   165
                                        170
63 Gln Ser Cys Asn Asn Leu Pro Leu Ser His Lys Val Tyr Met Arg Asn
               180
                                    185
66 Ser Lys Tyr Pro Gln Asp Leu Val Met Met Glu Gly Lys Met Met Ser
67
         195
                                200
                                                    205
69 Tyr Cys Thr Thr Gly Gln Met Trp Ala Arg Ser Ser Tyr Leu Gly Ala
       210
                            215
                                                220
72 Val Phe Asn Leu Thr Ser Ala Asp His Leu Tyr Val Asn Val Ser Glu
```

Input Set : A:\1110-0266P.ST25.txt
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73 225
                       230
                                           235
75 Leu Ser Leu Val Asn Phe Glu Glu Ser Gln Thr Phe Phe Gly Leu Tyr
                                       250
                  245
78 Lys Leu
82 <210> SEQ ID NO: 2
83 <211> LENGTH: 277
84 <212> TYPE: PRT
85 <213> ORGANISM: Artificial Sequence
87 <220> FEATURE:
88 <223> OTHER INFORMATION: Description of Artificial Sequence:amino acids at
         128-131 from N terminal are deleted from natural
89
90
         human Fas ligang
92 <400> SEQUENCE: 2
93 Met Gln Gln Pro Phe Asn Tyr Pro Tyr Pro Gln Ile Tyr Trp Val Asp
94 1
                   5
                                       10
96 Ser Ser Ala Ser Ser Pro Trp Ala Pro Pro Gly Thr Val Leu Pro Cys
               20
                                    25
99 Pro Thr Ser Val Pro Arg Arg Pro Gly Gln Arg Arg Pro Pro Pro
           35
                                 40
                                                    45
102 Pro Pro Pro Pro Pro Leu Pro Pro Pro Pro Pro Pro Pro Pro Leu Pro
                            55
                                                60
105 Pro Leu Pro Leu Pro Pro Leu Lys Lys Arg Gly Asn His Ser Thr Gly
                                             75
                        70
108 Leu Cys Leu Leu Val Met Phe Phe Met Val Leu Val Ala Leu Val Gly
                    85
                                         90
111 Leu Gly Leu Gly Met Phe Gln Leu Phe His Leu Gln Lys Glu Leu Ala
112
               100
                                    105
                                                        110
114 Glu Leu Arg Glu Ser Thr Ser Gln Met His Thr Ala Ser Ser Leu Gly
         115
115
                               120
                                                   125
117 His Pro Ser Pro Pro Pro Glu Lys Lys Glu Leu Arg Lys Val Ala His
       130
                           135
                                               140
120 Leu Thr Gly Lys Ser Asn Ser Arg Ser Met Pro Leu Glu Trp Glu Asp
                       150
                                            155
123 Thr Tyr Gly Ile Val Leu Leu Ser Gly Val Lys Tyr Lys Lys Gly Gly
                                     170
                   165
                                                            175
126 Leu Val Ile Asn Glu Thr Gly Leu Tyr Phe Val Tyr Ser Lys Val Tyr
                                   185
127
               180
                                                        190
129 Phe Arg Gly Gln Ser Cys Asn Asn Leu Pro Leu Ser His Lys Val Tyr
130
           195
                                200
132 Met Arg Asn Ser Lys Tyr Pro Gln Asp Leu Val Met Met Glu Gly Lys
       210
                            215
                                                220
135 Met Met Ser Tyr Cys Thr Thr Gly Gln Met Trp Ala Arg Ser Ser Tyr
                       230
                                            235
138 Leu Gly Ala Val Phe Asn Leu Thr Ser Ala Asp His Leu Tyr Val Asn
                   245
                                       250
141 Val Ser Glu Leu Ser Leu Val Asn Phe Glu Glu Ser Gln Thr Phe Phe
               260
                                    265
144 Gly Leu Tyr Lys Leu
145
          275
```

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Input Set : A:\1110-0266P.ST25.txt
Output Set: N:\CRF3\03022001\I508849.raw

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148 <210> SEQ ID NO: 3
149 <211> LENGTH: 281
150 <212> TYPE: PRT
151 <213> ORGANISM: Artificial Sequence
153 <220> FEATURE:
154 <223> OTHER INFORMATION: Description of Artificial Sequence:point mutation
155
         of a substitution of Lys 129 for Ala from N
156
         terminal is present in natural human Fas ligand
157
159 <400> SEQUENCE: 3
160 Met Gln Gln Pro Phe Asn Tyr Pro Tyr Pro Gln Ile Tyr Trp Val Asp
163 Ser Ser Ala Ser Ser Pro Trp Ala Pro Pro Gly Thr Val Leu Pro Cys
                                                         30
164
                20
                                     25
166 Pro Thr Ser Val Pro Arg Arg Pro Gly Gln Arg Arg Pro Pro Pro
            35
167
                                 40
169 Pro Pro Pro Pro Pro Leu Pro Pro Pro Pro Pro Pro Pro Pro Leu Pro
                             55
172 Pro Leu Pro Leu Pro Pro Leu Lys Lys Arg Gly Asn His Ser Thr Gly
                        70
                                             75
175 Leu Cys Leu Leu Val Met Phe Phe Met Val Leu Val Ala Leu Val Gly
                                        90
                    85
178 Leu Gly Leu Gly Met Phe Gln Leu Phe His Leu Gln Lys Glu Leu Ala
179
               100
                                    105
                                                        110
181 Glu Leu Arg Glu Ser Thr Ser Gln Met His Thr Ala Ser Ser Leu Glu
           115
                                120
184 Ala Gln Ile Gly His Pro Ser Pro Pro Pro Glu Lys Lys Glu Leu Arg
       130
                            135
                                                140
187 Lys Val Ala His Leu Thr Gly Lys Ser Asn Ser Arg Ser Met Pro Leu
188 145
                       150
                                            155
190 Glu Trp Glu Asp Thr Tyr Gly Ile Val Leu Ser Gly Val Lys Tyr
                   165
                                        170
193 Lys Lys Gly Gly Leu Val Ile Asn Glu Thr Gly Leu Tyr Phe Val Tyr
               180
                                   185
196 Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys Asn Asn Leu Pro Leu Ser
197 195
                               200
                                                    205
199 His Lys Val Tyr Met Arg Asn Ser Lys Tyr Pro Gln Asp Leu Val Met
       210
                           215
                                                220
202 Met Glu Gly Lys Met Met Ser Tyr Cys Thr Thr Gly Gln Met Trp Ala
                        230
203 225
205 Arg Ser Ser Tyr Leu Gly Ala Val Phe Asn Leu Thr Ser Ala Asp His
206
                   245
                                     250
208 Leu Tyr Val Asn Val Ser Glu Leu Ser Leu Val Asn Phe Glu Glu Ser
               260
                                    265
211 Gln Thr Phe Phe Gly Leu Tyr Lys Leu
           275
215 <210> SEQ ID NO: 4
216 <211> LENGTH: 774
217 <212> TYPE: DNA
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Input Set : A:\1110-0266P.ST25.txt
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218 <213> ORGANISM: Artificial Sequence
220 <220> FEATURE:
221 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA coding for
          amino acids SEQ ID No.1
224 <400> SEQUENCE: 4
225 atgcagcage cetteaatta eccatatece cagatetaet gggtggacag cagtgecage 60
226 totocotggg cocotocagg cacagttott cootgtocaa cototgtgcc cagaaggcot 120
227 ggtcaaagga ggccaccacc accaccgcca ccgccaccac taccacctcc gccgccgccg 180
228 ccaccactgc ctccactacc gctgccaccc ctgaagaaga gagggaacca cagcacaggc 240
229 ctqtqtctcc ttqtgatqtt tttcatqqtt ctqqttqcct tqqtaqqatt qqqcctqqgq 300
230 atgtttcagc tcttccacct acagaaggag cccagtccac cccctgaaaa aaaggagctg 360
231 aggaaagtgg cccatttaac aggcaagtcc aactcaaggt ccatgcctct ggaatgggaa 420
232 gacacctatg gaattgteet getttetgga gtgaagtata agaagggtgg cettgtgate 480
233 aatgaaactg ggctgtactt tgtatattcc aaagtatact tccggggtca atcttgcaac 540
234 aacctgcccc tgagccacaa ggtctacatg aggaactcta agtatcccca ggatctggtg 600
235 atgatggagg ggaagatgat gagctactgc actactgggc agatgtgggc ccgcagcagc 660
236 tacctggggg cagtgttcaa tettaccagt getgateatt tatatgtcaa egtatetgag 720
237 ctctctctgg tcaattttga ggaatctcag acgtttttcg gcttatataa gctc
240 <210> SEQ ID NO: 5
241 <211> LENGTH: 831
242 <212> TYPE: DNA
243 <213> ORGANISM: Artificial Sequence
245 <220> FEATURE:
246 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA coding for
247
          amino acids SEQ ID No.2
249 <400> SEQUENCE: 5
250 atgcagcage cetteaatta eccatatece cagatetaet gggtggacag cagtgecage 60
251 totocotggg cocotocagg cacagttott cootgtocaa cototgtgcc cagaaggcot 120
252 ggtcaaagga ggccaccacc accaccgcca ccgccaccac taccacctcc gccgccgccg 180
253 ccaccactgc ctccactacc gctgccaccc ctgaagaaga gagggaacca cagcacaggc 240
254 ctgtgtctcc ttgtgatgtt tttcatggtt ctggttgcct tggtaggatt gggcctgggg 300
255 atgtttcagc tcttccacct acagaaggag ctggcagaac tccgagagtc taccagccag 360
256 atgcacacag catcatcttt gggccacccc agtccacccc ctgaaaaaaa ggagctgagg 420
257 aaagtggccc atttaacagg caagtccaac tcaaggtcca tgcctctgga atgggaagac 480
258 acctatggaa ttgtcctgct ttctggagtg aagtataaga agggtggcct tgtgatcaat 540
259 gaaactgggc tgtactttgt atattccaaa gtatacttcc ggggtcaatc ttgcaacaac 600
260 ctgcccctga gccacaaggt ctacatgagg aactctaagt atccccagga tctggtgatg 660
261 atggagggga agatgatgag ctactgcact actgggcaga tgtgggcccg cagcagctac 720
262 ctgggggcag tgttcaatct taccagtgct gatcatttat atgtcaacgt atctgagctc 780
263 tototggtca attttgagga atotoagacg tttttcggct tatataagct c
266 <210> SEQ ID NO: 6
267 <211> LENGTH: 843
268 <212> TYPE: DNA
269 <213> ORGANISM: Artificial Sequence
271 <220> FEATURE:
272 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA coding for
          amino acids SEQ ID No.3
275 <400> SEQUENCE: 6
276 atgcagcage cetteaatta eccatateee cagatetaet gggtggacag cagtgecage 60
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Input Set : A:\1110-0266P.ST25.txt
Output Set: N:\CRF3\03022001\I508849.raw

277 totocotggg cocotocagg cacagttott cootgtocaa cototgtgcc cagaaggcot 120 278 ggtcaaagga ggccaccacc accaccgcca ccgccaccac taccacctcc gccgccgccg 180 279 ccaccactgo otocactaco gotgocacco otgaagaaga gagggaacca cagcacaggo 240 280 ctgtgtctcc ttgtgatgtt tttcatggtt ctggttgcct tggtaggatt gggcctgggg 300 281 atgtttcagc tettecacet acagaaggag etggcagaac teegagagte taccagecag 360 282 atgcacacag catcatcttt ggaggcacaa ataggccacc ccagtccacc ccctgaaaaa 420 283 aaggagetga ggaaagtgge ceatttaaca ggeaagteea acteaaggte catgeetetg 480 284 gaatgggaag acacctatgg aattgtcctg ctttctggag tgaagtataa gaagggtggc 540 285 cttgtgatca atgaaactgg gctgtacttt gtatattcca aagtatactt ccggggtcaa 600 286 tettgeaaca acctgeeect gageeacaag gtetacatga ggaactetaa gtateeecag 660 287 gatctggtga tgatggaggg gaagatgatg agctactgca ctactgggca gatgtgggcc 720 288 egeageaget acetggggge agtgtteaat ettaceagtg etgateattt atatgteaac 780 289 gtatctgage tetetetggt caattttgag gaateteaga egtttttegg ettatataag 840 290 ctc 293 <210> SEO ID NO: 7 294 <211> LENGTH: 20 295 <212> TYPE: DNA 296 <213> ORGANISM: Artificial Sequence 298 <220> FEATURE: 299 <223> OTHER INFORMATION: Description of Artificial Sequence:a sense primer 300 BOS6 302 <400> SEQUENCE: 7 303 cctcagacag tggttcaaag 20 306 <210> SEQ ID NO: 8 307 <211> LENGTH: 39 308 <212> TYPE: DNA 309 <213> ORGANISM: Artificial Sequence 311 <220> FEATURE: 312 <223> OTHER INFORMATION: Description of Artificial Sequence:an antisense deletion primer DA4 315 <400> SEQUENCE: 8 316 ttttcagggg gtggactggg ctccttctgt aggtggaag 39 319 <210> SEQ ID NO: 9 320 <211> LENGTH: 28 321 <212> TYPE: DNA 322 <213> ORGANISM: Artificial Sequence 324 <220> FEATURE: 325 <223> OTHER INFORMATION: Description of Artificial Sequence: HFLP3 327 <400> SEQUENCE: 9 28 328 gctctagaac attctcggtg cctgtaac 331 <210> SEQ ID NO: 10 332 <211> LENGTH: 30 333 <212> TYPE: DNA 334 <213> ORGANISM: Artificial Sequence 336 <220> FEATURE: 337 <223> OTHER INFORMATION: Description of Artificial Sequence: DA5 339 <400> SEQUENCE: 10 340 tggactgggg tggcccaaag atgatgctgt 30 343 <210> SEQ ID NO: 11

VERIFICATION SUMMARY

DATE: 03/02/2001

PATENT APPLICATION: US/09/508,849

TIME: 13:18:51

Input Set : A:\1110-0266P.ST25.txt

Output Set: N:\CRF3\03022001\I508849.raw